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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/551,742 | 07/24/2006 | Uwe Holland | 85844 | 4278 |
| 22342 7590 08/14/2009 FITCH EVEN TABIN & FLANNERY 120 SOUTH LASALLE STREET SUITE 1600 CHICAGO, IL 60603-3406 | | | | |
| EXAMINER MARCO ANTONI, PAUL D | | | | |
| ART UNIT 1793 | | PAPER NUMBER | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/551,742

Applicant(s)

HOLLAND ET AL.

Examiner

Paul Marcantoni

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2009 and 25 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1.5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1.5 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date 7/26/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Restriction and Election of Species:

The applicants' election of Group II and species of Portland cement as reactive support material and polyvinyl alcohol (PVOH) as the liquid polymer is acknowledged from applicants' 3/25/09 and 6/25/09 responses.

35 USC 102/103:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,5, and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Childs et al. '832, Beckenhauer '270, Schutt '191 B2, Standke et al. '766 B2, Mosquet et al. '948, Butler et al. '323, Berke '962 B2 or '281 A1, Gray '480 A1, Mueller '249 B2, Wallner '602 A1 or '545 B2, Shoshany et al. '623 A1, Symons '761 B2, Cowan et al. '598, Adams et al. '323, Cattanaach '784, Clark Jr et al. '555, or Ludwig '955.

Note: Claim 25 is non-elected and withdrawn since PVOH was elected polymer.

All the references above teach a composition comprising Portland cement that is mixed with polyvinyl alcohol (hereafter PVOH) thus anticipating applicants claims requiring a building material comprising a reactive support material (Portland cement) and a liquid polymer (PVOH) applied to it. Even if not anticipated, overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art.

Childs et al. teach mixing PVOH with hydraulic cement such as Portland cement to create a delay set thus anticipating applicants' claims. Even if not anticipated, overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art (see claim 1).

Beckenhauer teaches an admixture of porous building material and PVOH (see claims). The PVOH by mixing would coat the reactive support/substrate particles of Portland cement.

Schutt '191 and Standke et al. '766 B2 teach a silane coating which is a liquid polymer that is applied to Portland cement (see claims). This reference will be potentially withdrawn when applicants place only their specific elected species of PVOH into claim 1. The other species would thus be withdrawn or non-elected.

Mosquet et al. 'teach a wax (liquid polymer) coating on concrete (Portland cement and aggregate) which would coat Portland cement particles by mixing. Applicants can have this reference potentially removed by inserting PVOH (not the abbreviation-please write long form as polyvinyl alcohol in claims) into claim 1. This reference was only used as were the ones containing silane coating because claim 1 is

generic and does not teach any specific reactive support material. Applicants should amend claim so it only claims polyvinyl alcohol as the reactive support material in 1 a).

Butler et al. '323 teach a composition comprising Portland cement and siloxane coating thus anticipating applicants' claims. These two components when mixed will coat the cement particles (see claims). This reference would be withdrawn if applicants insert PVOH into claim 1.

Berke et al. '962 B2 or '281 A1 teach Portland cement coated with PVOH in column 7, lines 15-22 meeting applicants claims and anticipating them. Even if not anticipated, overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art.

Gray '480 teaches a composition comprised of cement and PVOH viscosity modifier. The act of mixing the two components will coat the cement particles thus meeting applicants' claim limitations (see claims 1 and 5).

Mueller '249 B2 teach a composition comprising cement and PVOH that is mixed together which would coat cement particles (see claims).

Wallner '602 A1 or '545 B2 teach a composition comprising cement, PVOH, and sand thus anticipating applicants' claims. The extra component of sand does not teach away from applicants' claims because "comprising" claim language fails to exclude ingredients such as sand (see claims).

Shoshany et al. '623 teach a composition comprising wax mixed with cement concrete which would coat the cement particles with wax (liquid polymer). However, this

reference will be withdrawn if applicants insert PVOH into claim 1 since this was the elected species.

Symons '761 B1 teach a composition comprising cement (hydraulic binder) and polyvinyl alcohol which is mixed to form a paste. It is the examiner's position that this mixing of these two componets will lead to coated particles of cement (coated with PVOH) in this paste thus anticipating applicants' claims. Even if not anticipated, overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art.

Cowan et al. '598 teaches mixing cement and PVOH/vinyl acetate liquid polymer which will coat cement particles (see claims).

Adams et al. '323 teach a composition comprising cement, fluid loss agent such as PVOH, etc. which are mixed together and coats the cement particles (reactive support material). See col.6, lines 28-33.

Cattanach '784 teach Portland cement mixed with PVOH which will coat cement particles (col.4, lines 10-30).

Clark Jr et al. '555 teach a composition comprising Portland Cement and PVOH and bentonite which when mixed together will coat cement particles with PVOH. Note that applicants' use of comprising claim language opens their claim to inclusion of other components such as bentonite clay.

Ludwig '955 teach a composition comprising Portland cement and PVOH and the mixing of the two components will lead to coated cement particles (see col.2, lines 20-40).

It is the examiner's position that he has provided the best available prior art in accordance with MPEP guidelines and it is not his intention to overwhelm applicants with many references. However, consideration of the broadness of applicants claims must be taken into account in regard to the number of references. It is expected that upon amendment many if not most references will be withdrawn. If applicants has any questions with examiner's position, they can call for an interview but his intention was to provide the prior art that meets applicants' claims and for applicants to use all this art to amend accordingly.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Paul Marcantoni/
Primary Examiner, Art Unit 1793